THE
PAN-PACIFIC ENTOMOLOGIST

Published by the
Pacific Coast Entomological Society
in co-operation with
The California Academy of Sciences

VOLUME SIX
July, 1929, to April, 1930

San Francisco, California
1930

CONTENTS

Blackwelder, Richard E.
The Larva of Eubrianax edwardsi Lec., Illustrated.....139

Blaisdell, Frank E., Sr.
Miscellaneous Studies in the Coleoptera, No. III, Illustrated 21
Miscellaneous Studies in the Coleoptera, No. III, (recte IV), Illustrated..... 57
Revision of the Genus and Species of Dinacoma with Description of a New Species, Illustrated.....171

Brisley, Harold R.
Occurrence of the Weevil Phyrdenus muriceus in Arizona 127

Carter, Walter
Record of an Insect Migration in the Arkansas Valley, Colorado 133

Chamberlin, Ralph V.
On Some Centipedes and Millipeds From Utah and Arizona, Illustrated 111

Crampton, G. C.
The Head Structures of the Orthopteron Stenopelmatus, Illustrated 97

Doudoroff, M.
A New Aberration of Euchloe ausonides.....143

Flanders, Stanley E.
Notes on Trichogramma minutum.....180

Gunder, J. D.
The Genus Euphydryas Scud. of Boreal America, Sixteen Plates 1
An Addition to Cynthia carye Hbn., One Plate..... 9
A State Butterfly for California, Illustrated..... 88

Hungerford, H. B.

Concerning Two of Guérin-Meneville's Types in the National Museum of Paris, Illustrated 73

Keifer, H. H.

The Larva of Cylindrocopturus crassus V. D., Illustrated 167

Klots, Alexander B.

A New Subspecies of Ascia monuste From Lower California, One Plate 145

Knowlton, George F.

Aphid Notes From Utah, Illustrated 33

Knowlton, G. F., and Pack, H. J.

Notes on Utah Syrphidæ 182

Lawson, Paul B.

Three New Leafhoppers From the Southwest, Illustrated 135

Light, S. F.

New Termite Records for Lower California 67

Termites Collected by T. T. Craig on Socorro Island 178

Martin, J. O.

Notes on the Genus Diodyrhynchus, with a Description of a New Species 129

Moulton, Dudley

New Mexican Thysanoptera 11

Pickens, A. L.

The "Coffee-Pot" Cocoon and the Insect that Makes It, Illustrated 63

Steinweden, John B.

Notes on the Origin of the Wax Secretion of Certain Coccinellid Larvæ, Illustrated 26

Tanner, Vasco M.
The Coleoptera of Utah—Cicindelidæ 78

Timberlake, P. H.
A New Species of the Encyrtid Genus Metaphycus From Washington 43
Records of Western Species of Perdita, with Descriptions of Two New Species 49

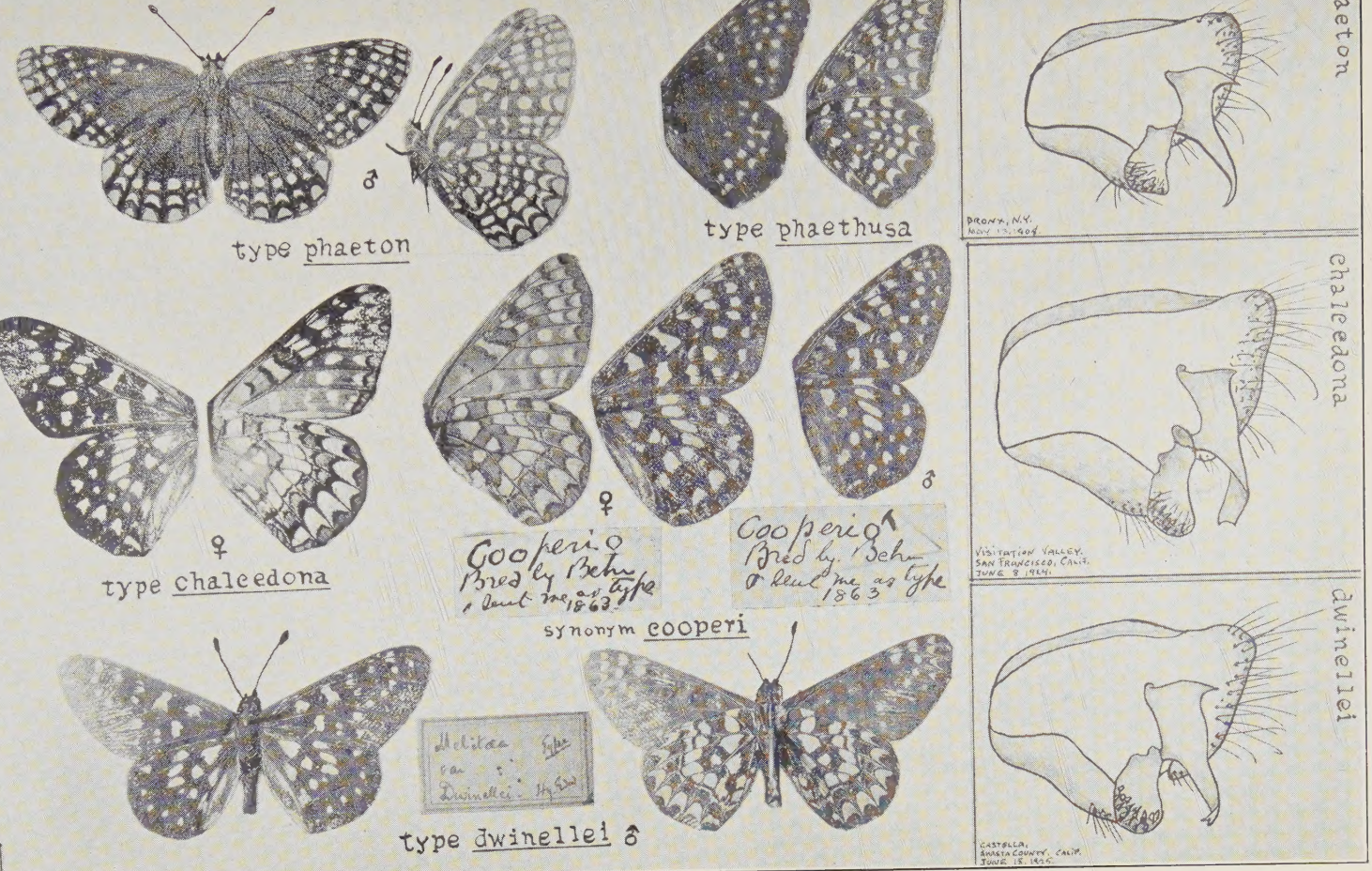
Usinger, R. L.
Two New Species of Vanduzeeina From California 131

Van Duzee, E. P.
A New Corimelæna 10
Walter M. Giffard, An Appreciation 46
A New Oliarus 72
Some Hemiptera Taken by Professor Cockerell in the Orient 91
Concerning Scientific Names 166
A New Empoasca 148
Editorials 48, 96, 144, 192

Van Duzee, M. C.
Three New Dolichopids From California and Colorado 123

Van Dyke, E. C.
The Correct Names of Certain Species of North American Meloe 122
New Rhynchophora From Western North America 149

Woodworth, C. W.
The Synchronization of Life Histories 189

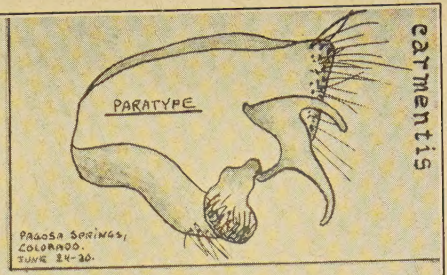

type phaeton
♂
type phaethusa
phaeton
BRONX, N.Y.
MAY 13, 1904
type chalcedona
♀
Cooperi ♀
Bred by Behr
& sent me as type
1863
Cooperi ♂
Bred by Behr
& sent me as type
1863
synonym cooperi
chalcedona
VISITATION VALLEY,
SAN FRANCISCO, CALIF.
JUNE 8 1904.
Melitaea Sylla
var ?
Dwinellei Hy Edw
type dwinellei ♂
dwinellei
CASTELLA,
SHASTA COUNTY, CALIF.
JUNE 15, 1905.
1

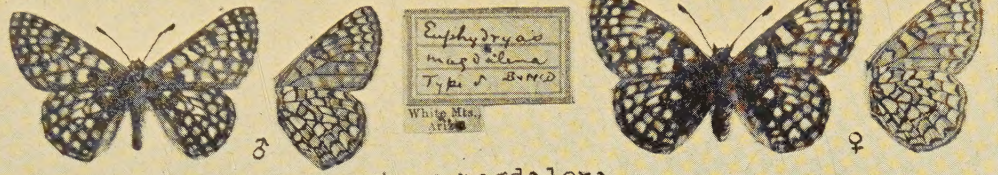
2
type colon
♂
♀
type wallaeensis
♂
♀
type (?) perdiceas
♂
Cooperi ♂
(Perdicas Edw.)
Puget Sd. Mar.
Cooperi ♀
(Perdicas)
Puget Sd. Ma
♀
type paradoxa
♂
♀
colon
YONCOLLA, OREG.
JULY 4, 1927.
wallaeensis
PARATYPE
WALLACE, IDAHO.
MAY 15, 1921.
perdiceas
VICTORIA, B.C. CAN.
MAY 20, 1927.
paradoxa
PARATYPE
SETON LAKE,
LILLOOET, B.C. CAN.
AUG 20.1926.

meglashanii
truckeensis
sierra
TRUCKEE, CALIF. MAY 1918.
TRUCKEE, CALIF. MAY 10, 1920.
GLEN ALPINE SPRINGS, LAKE TAHOE, CALIF. JULY 10, 1925.
♂
♀
meglashanii
type truckeensis
type sierra
3

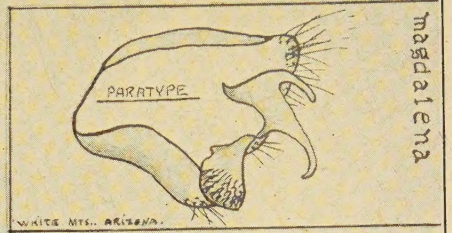
capella
bernadetta
maria
PARATYPE
PARATYPE
PARATYPE
Platte Canon
Col° 8-1873
W.H. Barnes
type capella
type bernadetta
type maria

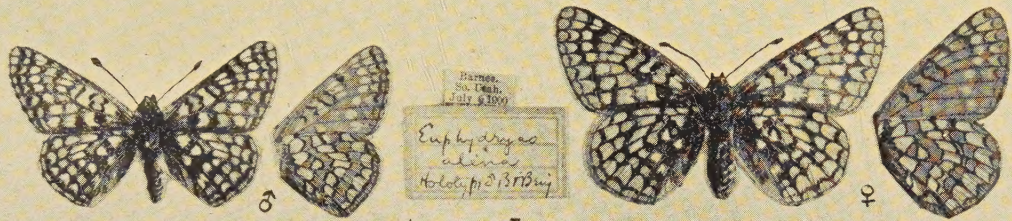
type carmentis



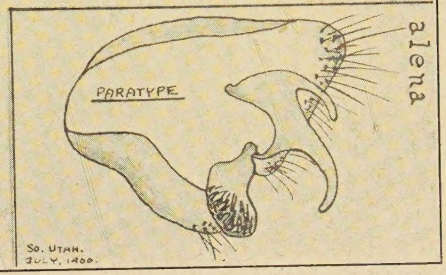


type magdalena



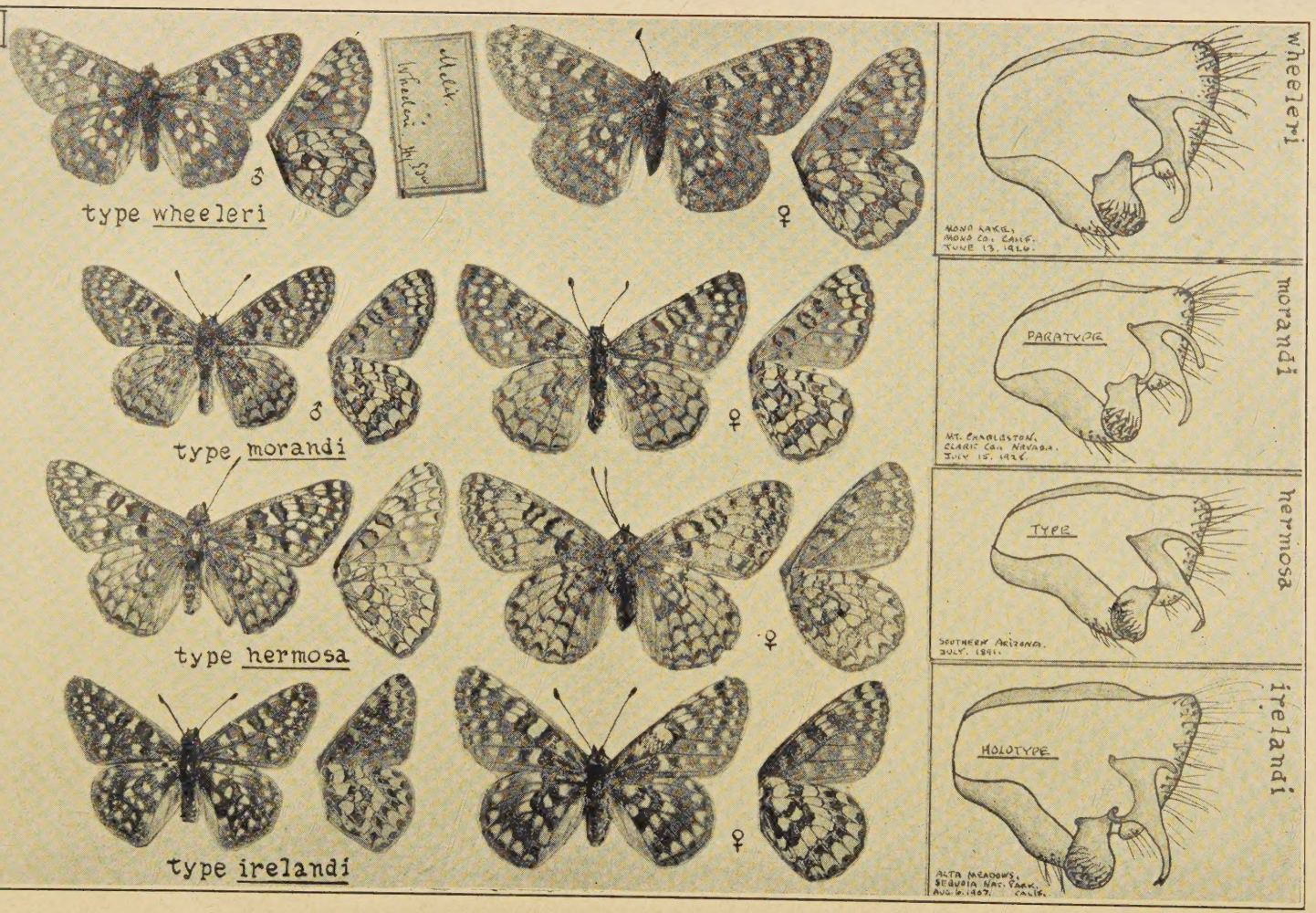


type alena



Gunder

8


♂
type wheeleri
♀
♂
type morandi
♀
type hermosa
♀
type irelandi
♀
wheeleri
MONO LAKE, MONO CO., CALIF. JUNE 13, 1916.
morandi
PARATYPE
MT. CHARLESTON, CLARK CO., NEVADA. JULY 15, 1926.
hermosa
TYPE
SOUTHERN ARIZONA. JULY, 1891.
irelandi
HOLOTYPE
ALTA MEADOWS, SEQUOIA NAT. PARK. AUG. 6, 1927. CALIF.

editha

wrighti

augusta

monoensis

type editha

type wrighti

type augusta

type monoensis

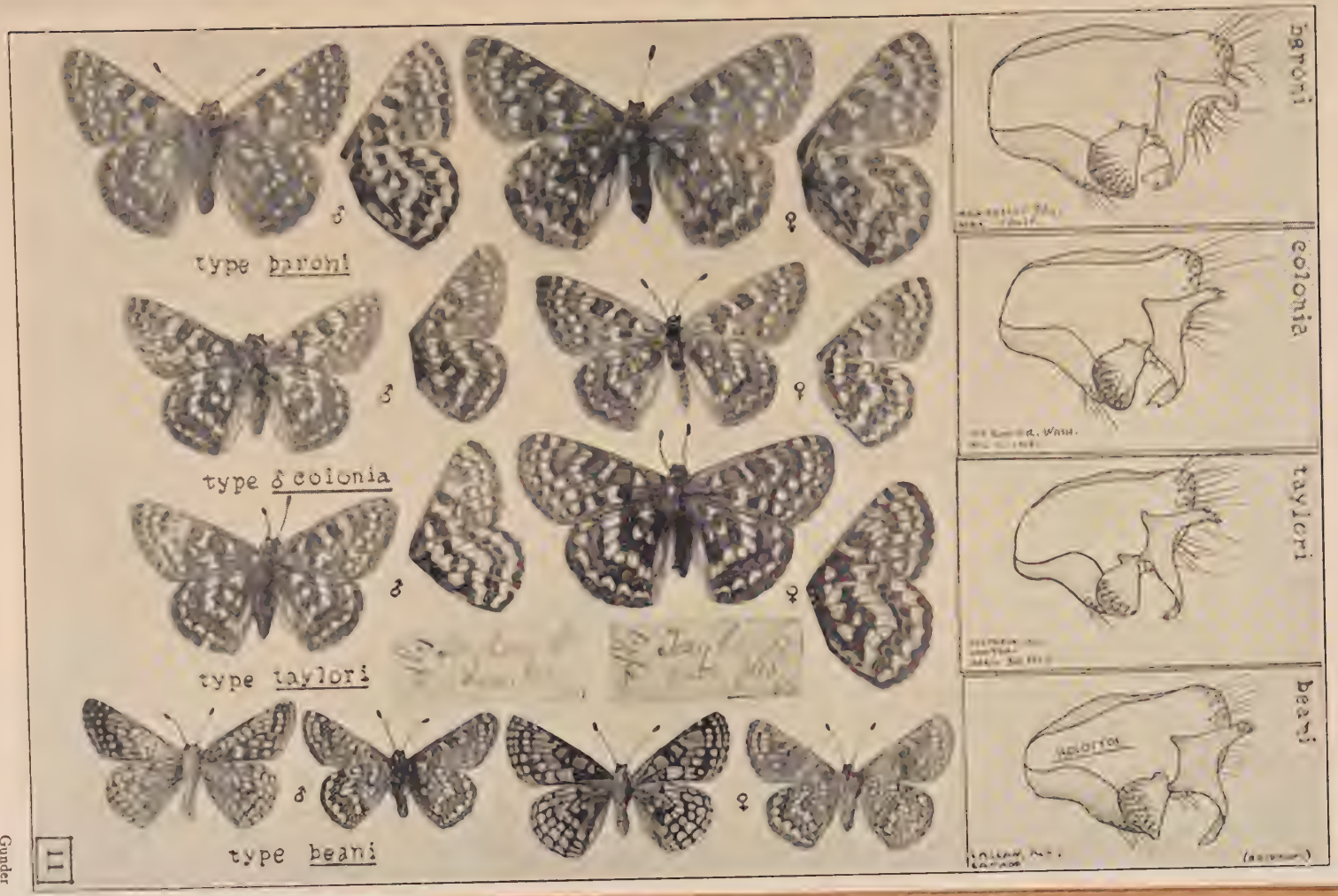
♂

♀

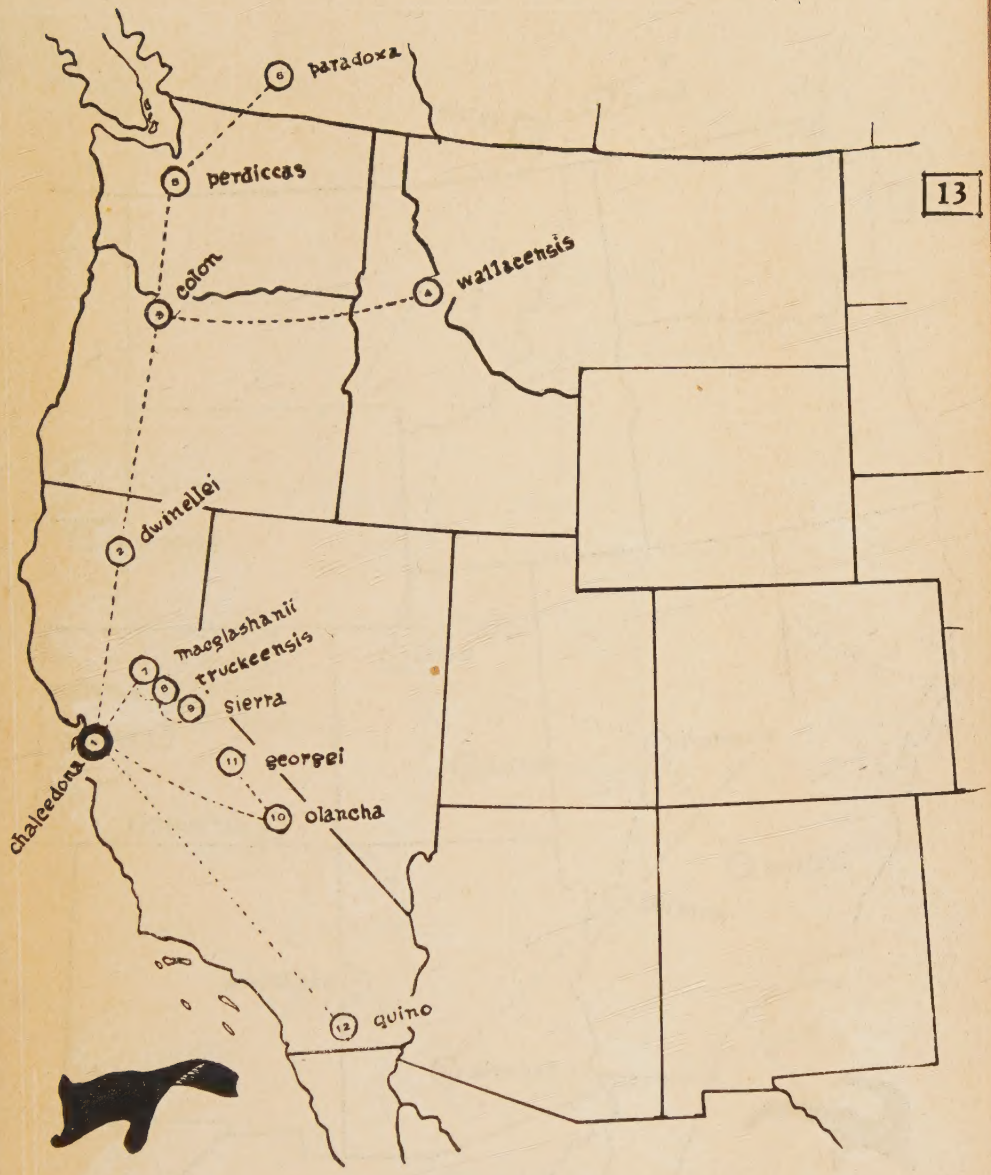
9

rubicunda
aurilacus
nubigena
edithana
♂
type rubicunda
♂
type aurilacus
♂
nubigena
♂
type ♂ edithana

10


type baroni
type δ colonia
type taylori
type beani
baroni
colonia
taylori
beani

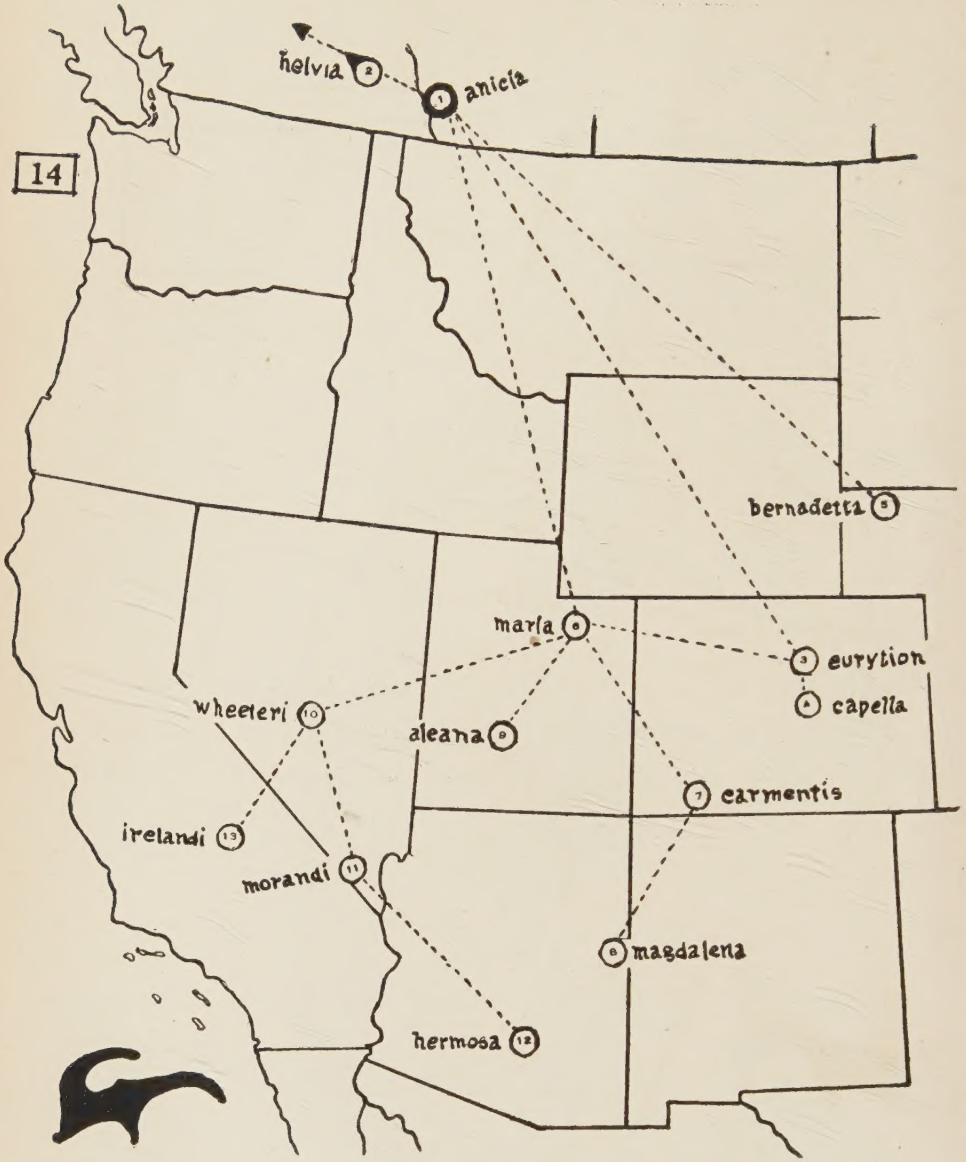
12
hutchinsi
montanus
lehmani
gillettii
PARATYPE
HOLOTYPE
type hutchinsi
type montanus
type lehmani
type ♂ gillettii
♂
♀



THE *Chalcedona* GROUP

showing type localities

1. species *chalcedona* Dbldy. & Hew., San Francisco, Calif.
2. race *dwinellei* Hy. Edw., Shasta Co., Calif.
3. race *colon* Edw., Columbia River, Oregon.
4. race *wallacensis* Gun., Wallace, Idaho.
5. race *perdiceas* Edw., Puget Sound, Washington.
6. loc. f. *paradoxa* McD., Lillooet, B. C., Canada.
7. race *mcglashanii* Rivers, Truckee, Calif.
8. form *truckeensis* Gun., Truckee, Calif.
9. race *sierra* Wri., Sierra Nevada Mts. (Glen Alpine Sprs., Calif.).
10. race *olancha* Wri., Olancha Peak or Mountain, Calif.
11. form *georgei* Gun., Casa Diablo Hills, Mono Co., Calif.
12. race *quino* Behr, San Diego Co. (eastern portion), Calif.



THE *Anicia* GROUP

showing type localities

1. species *anicia* Dbldy. & Hew., Rocky Mts. (Banff, Alb., Can.).
2. race *helvia* Scud., Alaska (between Whitehorse and Dawson).
3. race *eurytion* Mead, Colorado.
4. race *capella* Barnes, Manitou and Denver, Colo.
5. race *bernadetta* Leus., Monroe Can., Harrison, Sioux Co., Neb.
6. race *maria* Skin., Park City, Utah.
7. race *carmentis* B. & Benj., Pagosa Sprs., Archuleta Co., Colo.
8. race *magdalena* B. & McD., White Mts., Arizona.
9. race *alena* B. & Benj., So. Utah (between Parowan and Panguitch?).
10. race *wheeleri* Hy. Edw., So. Nevada (probably mts. of central part).
11. race *morandi* Gun., Mt. Charleston, Clark Co., Nevada.
12. race *hermosa* Wri., So. Arizona (Camp Roosevelt at Roosevelt Dam).
13. race *irelandi* Gun., Alta Peak, Sequoia Nat. Park, Calif.

THE *Editha* GROUP

showing type localities

1. species *editha* Bdv., Calif. (typical in Kern County).
2. race *wrighti* Gun., San Diego, Calif. (coastal areas).
3. race *augusta* Edw., Mountains of San Bernardino Co., Calif.
4. race *monoensis* Gun., Mono Lake, Calif.
5. race *rubicunda* Hy. Edw., Mariposa Co., Calif. (typical).
6. race *nubigena* Behr, Tuolumne Meadows, Yosemite Nat. Park, Calif.
7. race *aurilacus* Gun., Gold Lake, Sierra Co., Calif.
8. race *baroni* Edw., Mendocino Co., Calif.
9. race *edithana* Strd., Lassen Co., Calif. (also Klamath Co., Oreg.).
10. race *colonia* Wri., Mt. Hood, Oregon.
11. race *taylori* Edw., Victoria, Vancouver Isl., B. C., Canada.
12. race *beani* Skin., Laggan, Alberta, Canada.
13. race *hutchinsi* McD., Jefferson Co., (Milligan Can.) Montana.
14. loc. f. *montanus* McD., Mt. Washburn, Yellowstone Nat. Park, Wyoming.
15. race *lehmani* Gun., Mt. Wheeler, (Lehman Cave Resort) Nevada.

GENUS EUPHYDRYAS SCUD.

1. phaeton Dru. ——— (Ill. Ins. 1, 42, pl. XXI, 1770)
   phaetaena Hbn. ——— *(Verez. bek. Schmett, p. 28, 1818)*
   phaetontea Godt. ——— *(Enc. Method., 9, 288, 1819)*
   phaedon H.-S. ——— *(Corr. Blah. Regensb., vol. XIX, p. 105. 1865)*
   schausi Clark ——— *(Proc. U. S. Nat. Mus., v. 71, pp. 1-22, 1927)*
   form phaethusa Hlst. ——— (Bul. Brooklyn Ent. Soc., 3, 77, 1881)
   tr. f. superba Stkr. ——— (Stkr. Syn. Cat., 125, 1878)
   magnifica Clark ——— *(Proc. U. S. Nat. Mus., v. 71, p. 7, 1927)*
   tr. f. streckeri Ellsw. ——— (Ent. News, 13, 104, 1902)

2. chalcedona Dbldy. & Hew. ——— (Gen. Diur. Lepd., 1, 180, pl. XXIII, f. 1, 1847)
   cooperi Behr. ——— *(Proc. Calif. Acad. Sci., 3, 90, 1863)*
   form dwinellei By. Edw. ——— (Papilio, 1, 51, 1881)
   tr. f. fusimacula Barnes ——— (Can. Ent., 32, 42, 3, 1900)
   grundeli Cool. ——— *(Can. Ent., 40, 428, 1908)*
   lorquini Oberth. ——— *(Et. Lep. Comp., 9, (2), 76, pl. CCLIX, f. 2170, 1913)*
   suprafusa Comst. ——— *(Bul. So. Calif. Acad. Sci., 25, 30, 1926)*
   fusisecunda Comst. ——— *(Bul. So. Calif. Acad. Sci., 25, 31, 1926)*
   tr. f. mariana Barnes ——— (Can. Ent., 32, 42, 1900)
   supranigrella Comst. ——— *(Bul. So. Calif. Acad. Sci., 25, 30, 1926)*
   hemimelanica Comst. ——— *(Bul. So. Calif. Acad. Sci., 25, 31, 1926)*
   tr. f. omnilutefuscus Gun. ——— (Ent. News, 36, 195, pl. 5, f. 4, 1925)
   hemiluteofuscus Gun. ——— *(Ent. News, 36, 196, pl. 5, f. 5, 1925)*
   a. colon Edw. ——— (Papilio, 1, 45, 1881)
   tr. f. mcdunnoughi Gun. ——— (Can. Ent., v. LX, p. 163, f. 6, 1928)
   b. wallacensis Gun. ——— (Pan-Pac. Ent., v. 5, 2, p. 50, 1928)
   tr. f. idahoensis Gun. ——— (Pan-Pac., THIS ISSUE)
   tr. f. huellemani Comst. ——— (Bul. So. Calif. Acad. Sci., 25, 32, 1926)
   c. perdiceas Edw. ——— (Papilio, 3, 43, 1883)
   loc. form paradoxa McD. ——— (Can. Ent., v. LIX, 7, p. 159, 1927)
   tr. f. nigrisupernipennis Gun. ——— (Ent. News, 37, 4, pl. 1, f. 5, 1926)
   d. mcglashanii Rivers ——— (Proc. Calif. Acad. Sci., (2), 1, 102, 1888)
   form truckeensis Gun. ——— (Ent. News, v. XXXIX, 10, p. 205, 1928)
   tr. f. hilli Gun. ——— (Ent. News, v. XXXIX, 10, p. 206, 1928)
   e. sierra Wri. ——— (Butt. West Coast. p. 151, pl. XIX, 1905)
   tr. f. magdelenae Gun. ——— (Ent. News, v. XXXVI, p. 197, f. 8, 1925)
   tr. f. umbrobasana Gun. (Comst.) ——— (Bul. So. Calif. Acad. Sci., v. XXV, p. 32, 1926)
   f. olancha Wri. ——— (Butt. West Coast. p. 150, pl. XVIII, 1905)
   form georgei Gun. ——— (Ent. News, v. XXXIX, p. 396, pl. XIV, 1928)
   tr. f. malcolmi Gun. ——— (Ent. News, v. 38, p. 134, f. 3, 1927)
   g. quino Behr ——— (Proc. Calif. Acad. Sci., 3, 90, 1863)

3. anicia Dbldy. & Hew. ——— (Gen. Diur. Iep., 1, 179, pl. XXIII, f. 2, 1848)
   a. helvia Scud. ——— (Proc. Bost. Nat. Hist. Sco., 12, 405, 1869)
   b. eurytion Mead ——— (Wheeler Rept. Geol. Surv., 5, 759, 1875)
   brucei Edw. ——— *(Can. Ent., 20. 81. 1888)*
   tr. f. melanodisca Comst. ——— (Iepidepterist, 2, 34, pl. VI, f. 1-3, 1918)
   c. capella Barnes ——— (Can. Ent., 29, 41, 1897)
   tr. f. rubrolimbata Comst. ——— (Lepidopterist, 2, 34, pl. VI, f. 1-3, 1918)
   tr. f. oslari Gun. ——— (Ent. News, 36, 196, pl. 5, f. 7, 1925)
   d. bernadetta Leuss. ——— (Ent. News, 31, 102, 1920)
   tr. f. leussleri Gun. ——— (Ent. News, 38, 5, p. 138, f. 8, 1927)
   tr. f. belli Gun. ——— (Pan-Pac., THIS ISSUE)
   e. maria Skin. ——— (Can. Ent., 31, 12, 1899)
   tr. f. skinneri Gun. ——— (Can. Ent., v. LX, p. 164, f. 9, 1928)
   tr. f. spauldingi Gun. ——— (Can. Ent., v. LX, p. 165, f. 10, 1928)
   f. carmentis B. & Benj. ——— (Bul. Co. Calif. Acad. Sci., v. XXV, p. 92, 1926)
   tr. f. charloteae Gun. ——— (Can. Ent., v. LX, p. 165, f. 11, 1928)
   g. magdalena B. & McD. ——— (Barnes Contrib., 4, (2), 71, pl. XI, f. 1-4, 1918)
   h. alena B. & Benj. ——— (Bul. So. Calif. Acad. Sci., v. XXV, p. 92, 1926)
   i. wheeleri Hy. Edw. ——— (Papilio, 1, 52, 1881)
   j. morandi Gun. ——— (Ent. News, v. XXXIX, p. 304, pl. XIV, 1928)
   k. hermosa Wri. ——— (Butt. West Coast, p. 157, pl. XIX, 1905)
   l. irelandi Gun. ——— (Can. Ent., v. LXI, p. 45, 1929)

4. editha Bdv. ——— (Ann. Soc. Ent. Fr., (2), 10, 304, 1852)
   tr. f. fieldi Gun. ——— (Ent. News, 35, 155, pl. 2, f. e, 1924)
   a. wrighti Gun. ——— (Pan-Pac., THIS ISSUE)
   b. augusta Edw. ——— (Can. Ent., 22, 21, 1890)
   tr. f. augustina Wri. ——— (Butt. West Coast, 154, pl. XIX, f. 170, 1905)
   c. monoensis Gun. ——— (Pan-Pac. Ent., 5, 2, 49, f. a, 1928)
   d. rubicunda Hy. Edw. ——— (Papilio, 1, 52, 1881)
   tr. f. cottlei Gun. ——— (Can. Ent., v. LX, p. 164, f. 7, 1928)
   e. nubigena Behr ——— (Proc. Calif. Acad. Sci., 3, 91, 1863)
   form rubrosuffusa Comst. ——— (Bul. So. Calif. Acad. Sci., 25, 32, 1926)
   tr. f. tiogoensis Gun. ——— (Pan-Pac., THIS ISSUE)
   tr. f. hobarti Gun. ——— (Pan-Pac., THIS ISSUE)
   f. aurilacus Gun. ——— (Pan-Pac. Ent., 5, 2, 49, f. b, 1928)
   tr. f. albiradiata Gun. ——— (Ent. News, 37, 3, pl. I, f. 4, 1926)
   tr. f. foxi Gun. ——— (Ent. News, 35, 155, pl. 2, f. d, 1924)
   g. baroni Edw. ——— (Can. Ent., 11, 129, 1879)
   tr. f. mirabilis Wri. ——— (Butt. West Coast. 160. pl. XX, f. 184, 1905)
   tr. f. dunni Gun. ——— (Pan-Pac., THIS ISSUE)
   tr. f. sternitzkyi Gun. ——— (Pan-Pac., THIS ISSUE)
   h. edithana Strd. ——— (Archiv fur Nat., v. 80, A, 11, p. 155, 1914)
   i. colonia Wri. ——— (Butt. West Coast, p. 158, pl. XX, f. 180, 1905)
   j taylori Edw. ——— (Can. Ent., 20, 82, 1888)
   tr. f. victoria Gun. ——— (Ent. News, 37, 4, pl. I, f. 6, 1926)
   tr. f. barnesi Gun. ——— (Can. Ent., v. LX, 10, p. 164, pl. a, f. 8, 1928)
   k. beani Skin. ——— (Can. Ent., 28, 155, 1897)
   tr. f. blackmorei Gun. ——— (Ent. News, 37, p. 4, pl. I, f. 1, 1926)
   l. hutchinsi McD. ——— (Can. Ent., v. LX, 10, p. 248, 1928)
   loc. form montanus McD. ——— (Can. Ent., v. LX, 10, p. 249, 1928)
   m. lehmani Gun. ——— (Pan-Pac., THIS ISSUE)

5. gillettii Barnes ——— (Can. Ent., 29, 40, 1897)
   glacialis Skin. ——— *(Ent. News, 32, 80, 1921)*
   tr. f. herri Gun. ——— (Pan-Pac, THIS ISSUE)